

CARD-TYPE ELECTRONIC APPARATUS ASSEMBLY USING ULTRASONIC JOINING

Kuang-Yu Wang

Paul Hsueh

Jim Ni

ABSTRACT

A card-type electronic apparatus such as an SD card, a CF card, a Memory Stick card, or a USB flash drive is formed from an upper and lower cover that are bonded together at an interior seam formed using ultrasonic joining. Lower sidewalls on the lower cover create an installation pocket for the upper cover. The installation pocket not only simplifies alignment between the upper and lower covers, but also contains any bonder material overflow that might otherwise affect the external dimensions of the apparatus housing. The lower sidewalls can completely surround the upper cover, for drop in installation. Alternatively, the lower sidewalls can partially surround the upper cover, so that the upper cover can be slid into place during assembly.